UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

49443

7590

01/11/2010

Pearl Cohen Zedek Latzer, LLP 1500 Broadway 12th Floor New York, NY 10036 EXAMINER
CHAPEL, DEREK S
ART UNIT PAPER NUMBER

2872

DATE MAILED: 01/11/2010

	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
_	10/552,047	09/06/2006	Stephen Geoffrey Lipson	P-8277-US	6894

TITLE OF INVENTION: SYSTEM AND METHOD FOR PRODUCING A LIGHT BEAM WITH SPATIALLY VARYING POLARIZATION

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$755	\$300	\$0	\$1055	04/12/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where ar in m

maintenance fee notifications. CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				ation of maintenance fees will be mailed to the current correspondence address as ew correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.				
49443		/2010		Certificate of Mailing or Transmission				
Pearl Cohen Z 1500 Broadway 12th Floor	edek Latzer, LLP	I h Sta ado tra	I hereby certify that this Fee(s) Transmittal is being deposited with the Unit States Postal Service with sufficient postage for first class mail in an envelor addressed to the Mail Stop ISSUE FEE address above, or being facsim transmitted to the USPTO (571) 273-2885, on the date indicated below.					
New York, NY	10036	Г						
							(Signature)	
							(Date)	
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR	₹	ATTC	DRNEY DOCKET NO.	CONFIRMATION NO.	
10/552,047	09/06/2006	·	Stephen Geoffrey Lipson	1		P-8277-US	6894	
		I	A LIGHT BEAM WITH	_				
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSU	E FEE	TOTAL FEE(S) DUE	DATE DUE	
nonprovisional	YES	\$755 •	\$300	\$0 ¬		\$1055	04/12/2010	
EXAM		ART UNIT	CLASS-SUBCLASS	J				
	DEREK S lence address or indicatio	2872	359-489000 2. For printing on the					
CFR 1.363). Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.			or agents OR, alternat (2) the name of a sing registered attorney or 2 registered patent att listed, no name will be	me of a single firm (having as a member a attorney or agent) and the names of up to ed patent attorneys or agents. If no name is name will be printed.				
PLEASE NOTE: Un	less an assignee is ident th in 37 CFR 3.11. Comp	ified below, no assignee	THE PATENT (print or ty data will appear on the DT a substitute for filing ar (B) RESIDENCE: (CIT	patent. If an assignassignment.			ocument has been filed for	
Please check the appropri	riate assignee category or	categories (will not be p	rinted on the patent):	Individual 🗖 C	orporat	ion or other private gro	oup entity Government	
4a. The following fee(s)	are submitted:	4	b. Payment of Fee(s): (Ple	ase first reapply a	ny pre	viously paid issue fee	shown above)	
☐ Issue Fee ☐ Publication Fee (1)	No small entity discount r	permitted)	☐ A check is enclosed. ☐ Payment by credit card. Form PTO-2038 is attached.					
☐ Publication Fee (No small entity discount permitted)☐ Advance Order - # of Copies			☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).					
5. Change in Entity Sta	ntus (from status indicated in SMALL ENTITY statu	· · · · · · · · · · · · · · · · · · ·	b. Applicant is no los					
NOTE: The Issue Fee ar	nd Publication Fee (if req	uired) will not be accepte	ed from anyone other than				e assignee or other party in	
interest as shown by the	records of the United Sta	ites Patent and Trademar	k Office.					
Authorized Signature				Date				
Typed or printed name				-				
This collection of inform an application. Confider submitting the complete this form and/or suggest Box 1450, Alexandria, V Alexandria, Virginia 22	ntiality is governed by 35 dapplication form to the ions for reducing this but Virginia 22313-1450. DC	FR 1.311. The informati U.S.C. 122 and 37 CFR USPTO. Time will var rden, should be sent to the O NOT SEND FEES OR	on is required to obtain or 1.14. This collection is es y depending upon the ind he Chief Information Offic COMPLETED FORMS T	retain a benefit by stimated to take 12 vidual case. Any c er, U.S. Patent and O THIS ADDRES	the pub minute ommen Trader S. SEN	olic which is to file (and s to complete, includin ts on the amount of tir mark Office, U.S. Depa D TO: Commissioner f	by the USPTO to process) g gathering, preparing, and ne you require to complete urtment of Commerce, P.O. for Patents, P.O. Box 1450,	

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

OMB 0651-0033

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450

P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.			
10/552,047	09/06/2006	Stephen Geoffrey Lipson	P-8277-US 6894				
49443 7	49443 7590 01/11/2010			EXAMINER			
Pearl Cohen Zed	ek Latzer, LLP	CHAPEL,	DEREK S				
1500 Broadway			ART UNIT	PAPER NUMBER			
12th Floor New York, NY 10	036		2872 DATE MAILED: 01/11/201	0			

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 337 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 337 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)	
	10/552,047	LIPSON ET AL.	
Notice of Allowability	Examiner	Art Unit	
	DEDEK C CHAREI	2072	
	DEREK S. CHAPEL	2872	
The MAILING DATE of this communication apperall claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT R of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in or other appropriate commul GHTS. This application is s	this application. If not included nication will be mailed in due course	
1. ☑ This communication is responsive to <u>12/16/2009</u> .			
2. ☑ The allowed claim(s) is/are <u>1-28</u> .			
3. ☑ Acknowledgment is made of a claim for foreign priority unallow All b) ☐ Some* c) ☐ None of the: 1. ☐ Certified copies of the priority documents have		or (f).	
2. ☐ Certified copies of the priority documents have		n No.	
3. ☑ Copies of the certified copies of the priority do	• •		om the
International Bureau (PCT Rule 17.2(a)).	odinente nave been received	The matter of the application in	JIII (110
* Certified copies not received:			
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		a reply complying with the requirem	ents
4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give			E OF
5. CORRECTED DRAWINGS (as "replacement sheets") mus	st be submitted.		
(a) ☐ including changes required by the Notice of Draftspers	son's Patent Drawing Review	ı (PTO-948) attached	
1) ☐ hereto or 2) ☐ to Paper No./Mail Date			
(b) ☐ including changes required by the attached Examiner'Paper No./Mail Date	s Amendment / Comment or	in the Office action of	
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t			of
 DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT 			ne
Attachment(s) 1. ☐ Notice of References Cited (PTO-892)	5. ☐ Notice of Int	ormal Patent Application	
 Notice of Neterences Gled (110-092) Dotice of Draftperson's Patent Drawing Review (PTO-948) 		ımmary (PTO-413),	
3. ☐ Information Disclosure Statements (PTO/SB/08),	Paper No./	Mail Date Amendment/Comment	
Paper No./Mail Date	<u></u>		_
 Examiner's Comment Regarding Requirement for Deposit of Biological Material 	8. ⊠ Examiner's 9. ☐ Other	Statement of Reasons for Allowance	3
/D. S. C./		-	
Examiner, Art Unit 2872			

Application/Control Number: 10/552,047 Page 2

Art Unit: 2872

DETAILED ACTION

Status Of Claims

- 1. This Office Action is in response to an amendment received 12/16/2009 in which Applicant lists claims 2-12, 14, 16-26 and 28 as being original, claim 15 as being previously presented, and claims 1, 13 and 27 as being currently amended. It is interpreted by the examiner that claims 1-28 are pending.
- 2. It is noted that although claims 29 and 30 were not listed, they should have been listed as cancelled. Therefore, applicant is reminded that a complete listing of the claims must be included or the amendment can be held as non-compliant.

Drawings

3. The amendments to the specification were received on 12/16/2009. These amendments are accepted. The objections to the drawings cited in the office action mailed 10/27/2009 are hereby withdrawn.

Specification

4. The amendments to the specification dated 12/16/2009 are accepted. The objections to the specification cited in the office action mailed 10/27/2009 are hereby withdrawn.

Allowable Subject Matter

- 5. Claims 1-28 are allowed.
- 6. The following is an examiner's statement of reasons for allowance:

Application/Control Number: 10/552,047

Art Unit: 2872

Claim 1 is allowable over the cited art of record for at least the reason that the cited art of record fails to teach or reasonably suggest an apparatus for providing a light beam with spatially varying polarization comprising polarized light reflected from one reflector and passing through the polarizer before it reaches the other; whereby a non-polarized light beam incident along a given axis on one of the reflectors is radially reflected off that reflector, acquires predetermined polarization by passing through the polarizer and is then reflected off the second reflector to produce an outgoing light beam of spatially varying polarization, as generally set forth in claim 1, the device including, in combination with the totality of the particular limitations recited in the remainder of claim 1. Claims 2-14 depend from claim 1 and therefore are allowable for at least the same reasons as claim 1.

Page 3

Claim 15 is allowable over the cited art of record for at least the reason that the cited art of record fails to teach or reasonably suggest a method for providing a light beam with spatially varying polarization comprising providing a polarizer positioned in an optical path between the two reflectors, for polarizing light reflected from one reflector before it reaches the other; and directing a non-polarized light beam along a given axis onto one of the two reflectors, so that it is reflected off that reflector to the other reflector, acquiring predetermined polarization as it passes through the polarizer, and reflected off the other reflector as an outgoing light beam, whereby the outgoing beam acquires varying spatial polarization, as generally set forth in claim 15, the device including, in combination with the totality of the particular

Application/Control Number: 10/552,047 Page 4

Art Unit: 2872

limitations recited in the remainder of claim 15. Claims 16-28 depend from claim 15 and therefore are allowable for at least the same reasons as claim 15.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

7. Applicant's arguments, see pages 11-13, filed 12/16/2009, with respect to the rejections of the claims have been fully considered and are persuasive. The rejections of the claims have been withdrawn.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DEREK S. CHAPEL whose telephone number is (571)272-8042. The examiner can normally be reached on M-F 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephone B. Allen can be reached on 571-272-2434. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/552,047 Page 5

Art Unit: 2872

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. S. C./ Examiner, Art Unit 2872 1/2/2010 /Arnel C. Lavarias/ Primary Examiner, Art Unit 2872